DNSSEC.CZ - history

- April 4, 2008 - ENUM (0.2.4.e164.arpa)
- September 2, 2008 – .CZ signed
- September 30, 2008 - .CZ open for end-user public key registration (KEYSET records)
- July 15, 2010 – root zone signed
- NSEC->NSEC3
  - 0.2.4.e164.arpa – Jun 2010
  - CZ – August 2010
- NSEC3 w/o OPT-OUT (high % of signed)
DNSSEC.CZ – Key points

- Incentives for registrars
- Direct communication with major stakeholders – registrars, ISPs, and Government, major websites
- Open source supporting tools - DANE
- Long term DNSSEC related PR/Campaigns
- Technical conferences
Incentives for registrars

- **Technical** – DNSKEY object shared by multiple domains – bulk operations

- **Marketing** – Registrar certification – hard to get 5 stars without DNSSEC support

- **Financial** – Co-marketing – 50% expenses covered if campaign related to .cz – DNSSEC penetration means higher caps

<table>
<thead>
<tr>
<th>Registrar</th>
<th>Website</th>
<th>Technologies</th>
<th>Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>KRAXNET s.r.o.</td>
<td><a href="http://www.xnet.cz">http://www.xnet.cz</a></td>
<td>🌐IPv6</td>
<td>🌟🌟🌟🌟🌟</td>
</tr>
<tr>
<td>IGNUM, s.r.o.</td>
<td><a href="http://www.domena.cz">http://www.domena.cz</a></td>
<td>🌐IPv6</td>
<td>🌟🌟🌟🌟🌟</td>
</tr>
<tr>
<td>ACTIVE 24, s.r.o.</td>
<td><a href="http://www.active24.cz">http://www.active24.cz</a></td>
<td>🌐IPv6</td>
<td>🌟🌟🌟🌟🌟</td>
</tr>
</tbody>
</table>
Tools

- Browser DNSSEC TLSA validator – browser addon - Firefox, Chrome, IE
- Bogus domain checks – ISPs
- DNSSEC HTML widget
- Turris project – Secure CPE
- Check http://labs.nic.cz
- Open source
Campaigns

- Good domain – IT Crowd style guy explaining why is important to have a (signed) domain
- Twins – strange video played by people looking like some celebrities – secure domains
- Internet how to – 2 minutes educational spots – prime time – major Czech TV, DNSSEC and IPv6
Current situation

- 38% of all Czech domains (433k of 1.1M) – growing
- All major registrars (with 90% of market share) support DNSSEC – many sign by default
- Many major ISPs validate - 2 of 3 cell phone operators; majority of B2B; major xDSL provider
- Many important sites signed – news, banks, ...
- DNSSEC in gov. strategy – Digital Czech 2.0
Thank You!

Ondrej Filip • ondrej.filip@nic.cz • http://www.nic.cz